Army Traumatic Brain Injury Program

Prepared for

Brain Injury Awareness Month

Proponency Office for Rehabilitation and Reintegration
Health Policy and Services
Office of The Surgeon General

25 Feb 2009

UNCLASSIFIED

Agenda

1. Traumatic Brain Injury (TBI) Overview
2. Army TBI Program
3. Conclusion

What is TBI?

- Traumatic brain injury (TBI) is a disruption of function in the brain resulting from a blow or jolt to the head or penetrating head injury.

- Not all blows to the head result in injury

- TBI can be caused by:
  - Falls
  - Motor vehicle and motorcycle crashes
  - Assaults
  - Explosions
  - Sports injuries

Severity of TBI

- The severity of injury may range from “mild” (a brief change in mental status or consciousness) to “severe” (an extended period of unconsciousness or amnesia after the injury). TBIs can also be penetrating.

Concussion

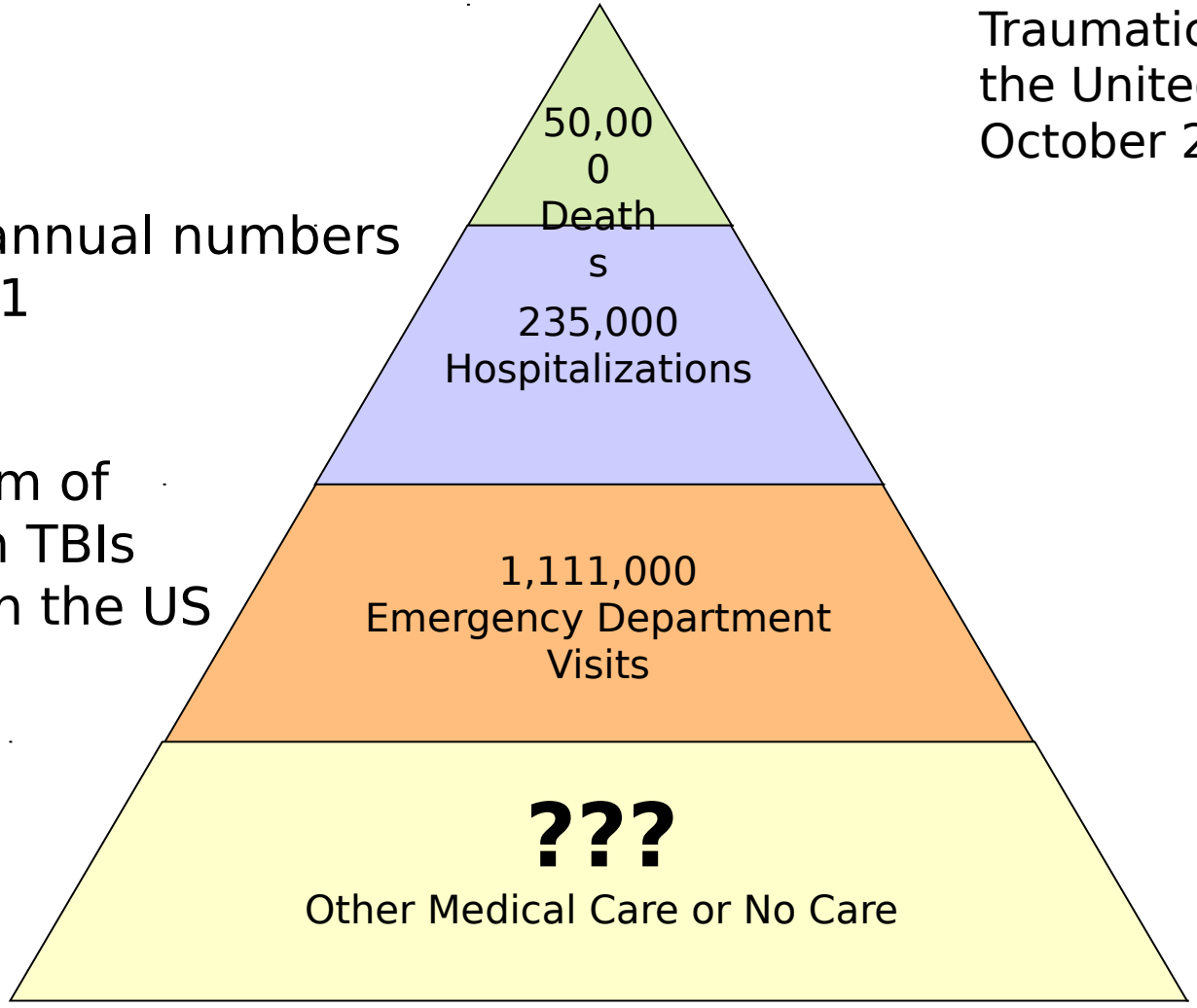
- Concussion, also known as Mild TBI
  - A clinical diagnosis with no singular objective test to confirm diagnosis
  - Diagnosis based upon a definition
    - Requires an injury event AND an alteration of mental status
    - Definition in HA policy 1 OCT 07
    - IAW major medical academic definitions
  - Requires clinical judgment
  - May require self-report
  - Symptoms are not definitional - symptoms such as headache, dizziness, irritability, fatigue or poor concentration, when identified soon after injury, can be used to support the diagnosis of mild TBI, but CANNOT be used to make the diagnosis
  - Most important thing to do is allow enough time to heal
  - Recovery is usually quick, but the time greatly depends on the individual and the nature of the injury
  - Important to let a provider decide when it's time to return to duty

TBI in the United States

Source: CDC: Traumatic Brain Injury in the United States, October 2004

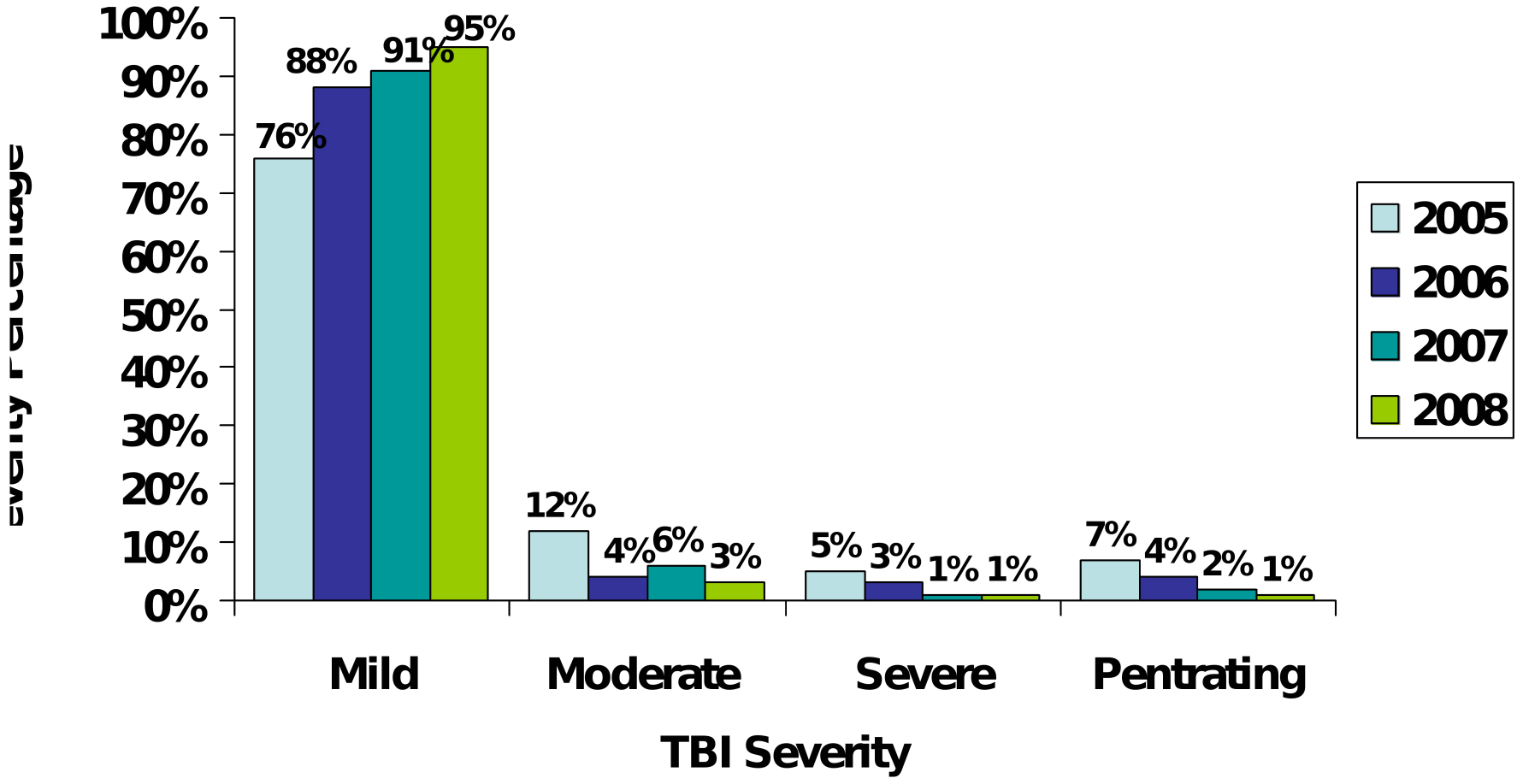
Average annual numbers
1995-2001

A minimum of
1.4 Million TBIs
Per year in the US



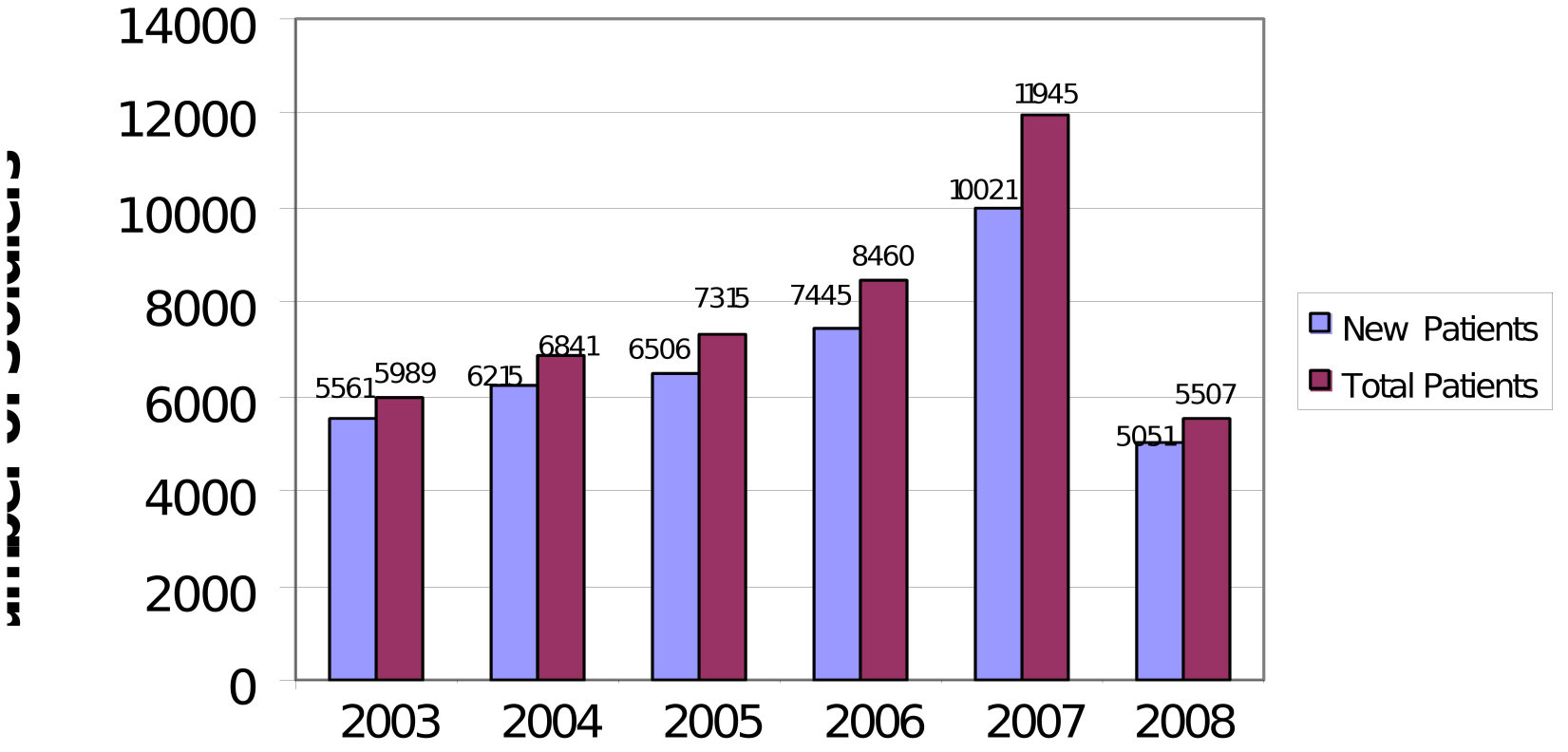
TBI in the Military

DVBIC Sites Only



All degrees of Severity captured at LRMC since JUN 07

TBI- Total and New Soldiers Per Fiscal Year



*FY2008 data are incomplete **2003 2004 2005 2006 2007* 2008**

Army TBI Program

- Purpose: To establish a standardized, comprehensive program that provides a continuum of integrated care and services for Soldiers and patients with TBI from point-of-injury to return to duty or transition from active duty and/or return to highest functional level.

- Desired End State: State-of-the-art, continuously improving care for Soldiers, beneficiaries, and their Families with TBI within Army MTFs, according to their TBI program capability level, in order to optimize functional outcomes and return to duty. Every medical facility is validated to provide TBI care congruent with the level of care provided at the facility. When necessary, this care is provided in conjunction with Department of Veteran's Affairs (DVA) and TRICARE partners.

Partners

- The Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) serves as an open front door for warriors, veterans and families living with brain injury and is a source of information, understanding, help and strength in dealing with TBI
- DCoE Outreach Center available 24 hours a day, seven days a week at 1-866-966-1020, by email at resources@dcoeoutreach.org.

- The Defense and Veterans Brain Injury Center is the DoD point of evaluation, treatment and clinical research on TBI. It provides treatment and follow-up TBI care to active duty service members, Veterans and their family members.

Accomplishments

- DoD definition for TBI
- Improved detection, documentation, screening and treatment
- TBI Program Validation
- Education initiatives
- Marketing and Communication
- Research initiatives

DoD Definition for TBI

Traumatic brain injury (TBI) is a traumatically-induced structural injury and/or physiological disruption of brain function as a result of an external force that is indicated by new onset or worsening of at least one of the following clinical signs, immediately following the event:

(1) Any period of loss, or a decreased level, of consciousness.

(2) Any loss of memory for events immediately before or after the injury.

(3) Any alteration in mental state at the time of the injury (confusion, disorientation, slowed thinking, etc.).

(4) Neurological deficits (weakness, loss of balance, change in vision, praxis, paresis/plegia, sensory loss, aphasia, etc.) that may or may not be transient.

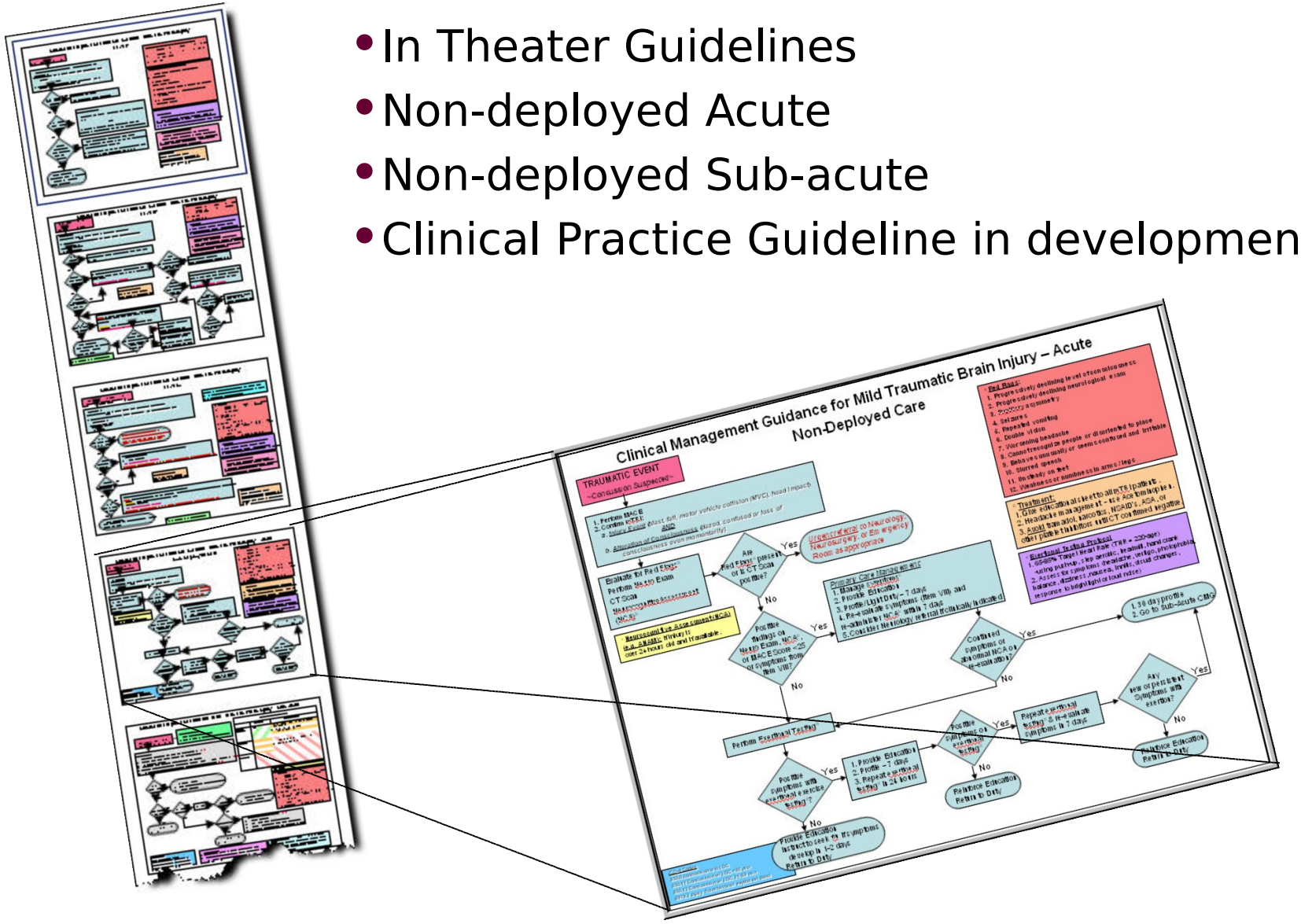
(5) Intracranial lesion.

- External forces may include any of the following events: the head being struck by an object, the head striking an object, the brain undergoing an acceleration/deceleration movement without direct external trauma to the head, a foreign body penetrating the brain, forces generated from events such as a blast or explosion, or other force yet to be defined.

Adopted by DoD 1 Oct 07

Clinical Management Guidance

- In Theater Guidelines
- Non-deployed Acute
- Non-deployed Sub-acute
- Clinical Practice Guideline in development



Army MTF TBI Program Validation

Four categories of PR&R TBI Programs:

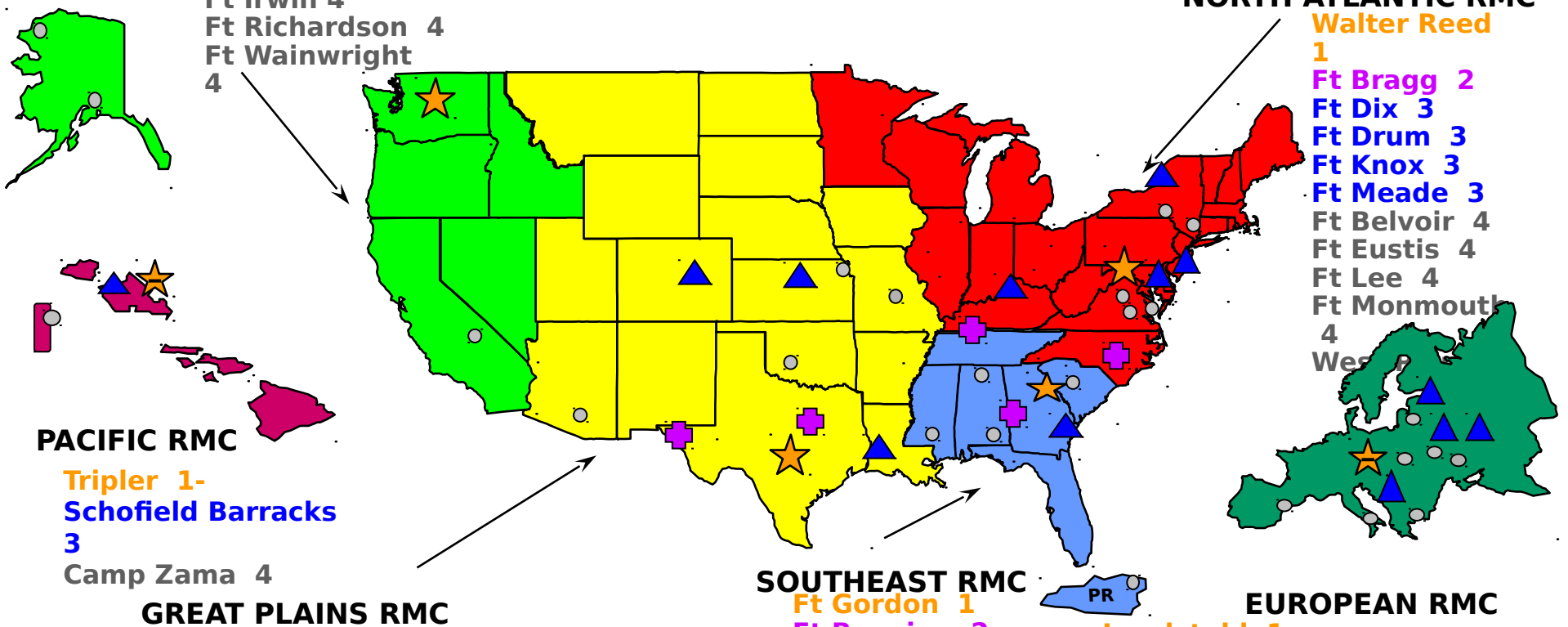
1. Providing inpatient and outpatient care for the full spectrum of traumatic brain injury severity (mild, moderate, and severe).
2. Providing inpatient and outpatient care for mild and moderate traumatic brain injuries.
3. Providing outpatient medical and rehabilitative care for Soldiers with mild and mild-moderate TBI.
4. Providing outpatient medical care for Soldiers with mild TBI and refer for additional services as needed.

Validation:

- The validation criteria are divided by functional program areas: management, assessment, treatment, education, and metrics.
- The program management requirements are divided into two phases.
  - Initial validation - awarded upon submission and verification of completion of phase 1 requirements
  - Full validation awarded upon submission and verification of the implementation of the full program

Every medical facility has a designated TBI Program Manager

Army Traumatic Brain Injury Program Validation



Updated: 18 May 08

Education Initiatives

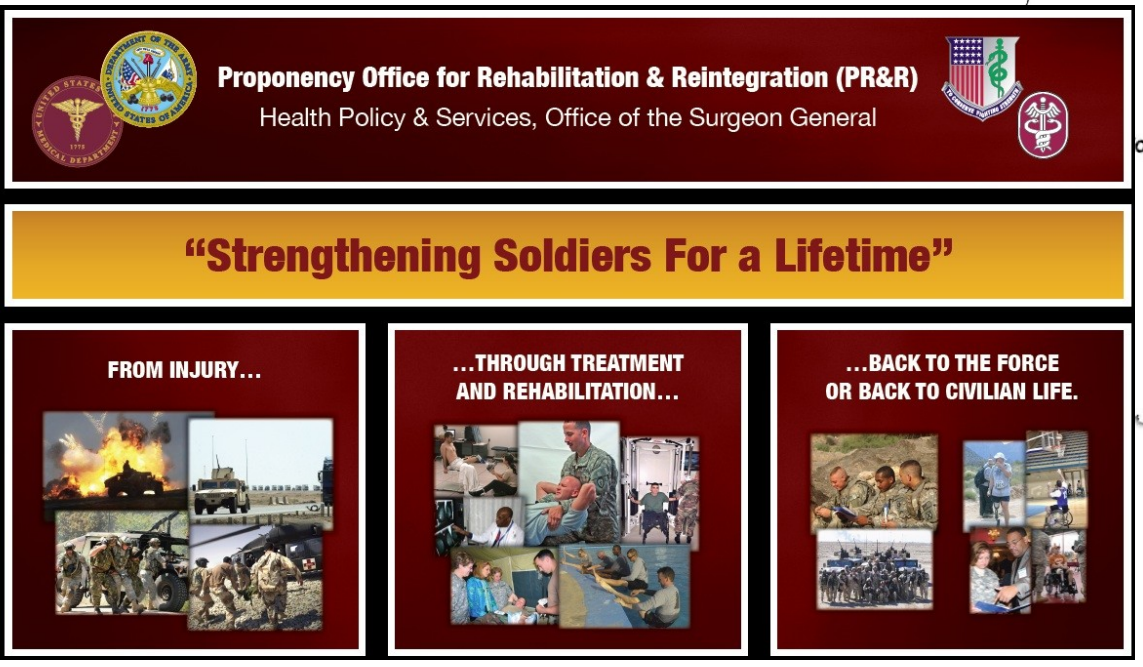
Sample Curriculum Outline for Traumatic Brain Injury
Office of the Surgeon General/Army Medical Department
Health Policy & Services
Proponency Office for Rehabilitation & Reintegration
Plan: Develop many educational tools/modules
Design training packages based on audience
Distribute training using multiple vehicles (DVD, MHS Learn, live presentations, distance learning, etc)
Mandate training for different audiences
Track training compliance
TBI 100 SERIES
TBI 101
GENERAL INFORMATION
TBI Foundation
Audience: All audiences
Presenter: To Be Determined (TBD)
Proponency Office for Rehabilitation and Reintegrat
Automated Neuropsychological Assessment Metrics
Things You Should Know.....
Why is the ANAM test importa
Proponency Office for Rehabilitation & Reintegration
Traumatic Brain Injury (TBI)
Fact Sheet
What is TBI?
Brain injury is the Silent Epidemic
What Causes TBI?
The Leading Causes of TBI :
Risk Factors:
What are the Long Term Consequences of a Traumatic Brain Injury?

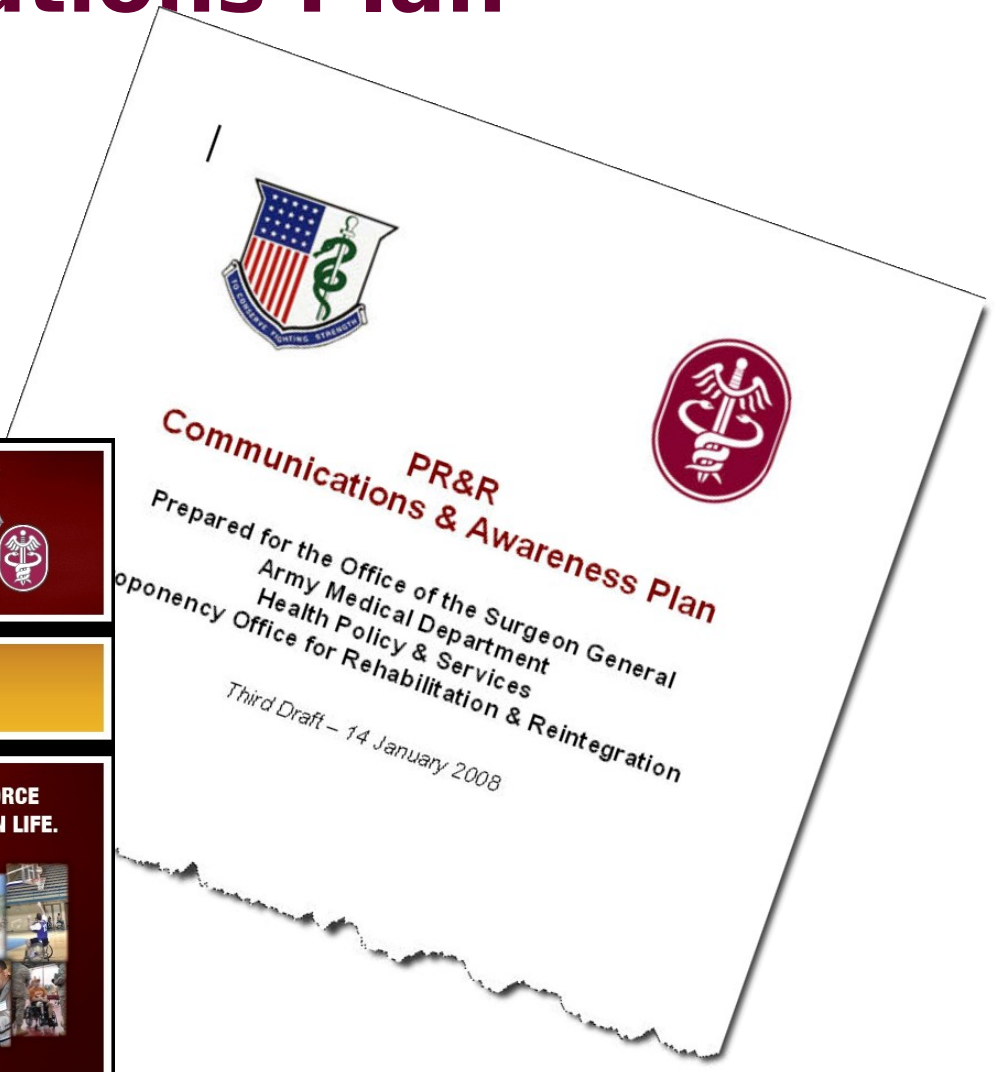
- **Comprehensive TBI Education Curriculum**
- **Conferences**
- **Tools for Providers, Patients, Soldiers, Families and Leaders**

http://www.armymedicine.army.mil/prf/edtraining.html

Communications Plan

- Comprehensive
- Proactive


Proponency Office for Rehabilitation & Reintegration (PR&R)
Health Policy & Services, Office of the Surgeon General
"Strengthening Soldiers For a Lifetime"
FROM INJURY…
…THROUGH TREATMENT AND REHABILITATION…
…BACK TO THE FORCE OR BACK TO CIVILIAN LIFE.


PR&R
Communications & Awareness Plan
Prepared for the Office of the Surgeon General
Army Medical Department
Health Policy & Services
Proponency Office for Rehabilitation & Reintegration
Third Draft – 14 January 2008

Research Initiatives

- Intramural funding/fast track
  - DOD and VA
  - Within Congressional intent and target investment
  - Target investment strategy not to exceed 25%
- Centers of Excellence – 15%
- Extramural/Intramural – 60%
  - Six award mechanisms

Conclusion

- Army TBI Program activities started in advance of multiple high level recommendations and continues to gain momentum
- The Army TBI Task Force Report is the foundation for the AMEDD TBI Action Plan and resource allocation
- Concussion is the same as Mild TBI
- The overwhelming majority of brain injuries are concussions and most Soldiers experience a full recovery with no lasting symptoms or difficulties
- Reporting injuries and getting a medical examination is important - Seeking help is an act of strength and courage

Strengthening Soldiers for a Lifetime…Army Strong!!

Proponency Office for Rehabilitation & Reintegration
Health Policy & Services
Office of The Surgeon General